

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1-.8 (Canceled)

9. (Currently Amended) A method of producing ~~ethers~~ an ether, which comprises subjecting a conjugated diene compound and an alcohol to a telomerization reaction in the presence of ~~the~~ a catalyst composition of claim 1 as a catalyst to give an ~~ether~~ ether, wherein the catalyst composition comprises

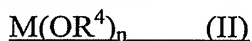
(i) a palladium compound,

(ii) an isocyanide represented by the formula (I)



wherein R¹, R² and R³ are the same or different and each is an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted aryl group, or an optionally substituted aralkyl group, or two of them optionally form a cycloalkyl group together with a carbon atom bonded thereto, and

(iii) a base represented by the formula (II)



wherein M is an alkali metal, an alkaline earth metal, or an onium, R⁴ is a hydrogen atom, an optionally substituted alkyl group, an optionally substituted alkenyl group, an optionally substituted aryl group, or an optionally substituted aralkyl group, with the proviso that when M is an alkali metal or an onium, then n is 1, and when M is an alkaline earth metal, then n is 2.

10. (Original) The production method of claim 9, wherein the alcohol is represented by the formula (VII)



wherein R¹⁹ is an alkyl group optionally having substituents, an alkenyl group optionally having substituents, an aryl group optionally having substituents or an aralkyl group optionally having substituents.

11. (Original) The production method of claim 9, wherein the alcohol is selected from methanol, ethanol, 1-propanol, 2-propanol, 2-methyl-1-propanol, 1-butanol, 2-butanol, pentanol, isoamyl alcohol, cyclopentanol, hexanol, 2-hexanol, cyclohexanol, heptanol, octanol, 2-octanol, 3-octanol, benzyl alcohol, phenethyl alcohol, phenol, ethylene glycol, diethylene glycol, propylene glycol, ethylene glycol monomethyl ether, ethylene glycol monoethyl ether, diethylene glycol monomethyl ether, diethylene glycol monoethyl ether, propylene glycol monomethyl ether and propylene glycol monoethyl ether.

12. (Canceled)

13. (Canceled)

14. (Original) The production method of claim 9, wherein the palladium compound is a divalent palladium salt.

15. (Original) The production method of claim 9, wherein the amount of the palladium compound to be used is within the range of 0.0000001-0.00002 equivalent per the conjugated diene compound.

16. (Canceled)

17. (Original) The production method of claim 9, wherein the amount of the isocyanide to be used is within the range of 0.1-50 equivalents per the palladium compound.

18.-20. (Canceled)

21. (Original) The production method of claim 9, wherein the reaction temperature of the telomerization reaction is within the range of 0°C - 150°C.

22. (Canceled)